TECHNICAL WRITERS



WHAT DOES A TECHNICAL WRITER DO?

TECHNICAL WRITERS compose communication from product developers for users of the products. Users include consumers as well as scientists, engineers, plant executives, line workers, and production managers. Writers must write in a concise and easy-to-read manner for consumer publications or in highly specialized language for experts. With the increased use of desktop publishing, Technical Writers increasingly are responsible for the publication process including graphics, layout, and document design.

Technical Writers create product instructions, reference and maintenance manuals, articles, project proposals, training materials, technical reports, catalogs, brochures, online documentation and help systems, Web

CALIFORNIA OCCUPATIONAL GUIDE - **NUMBER 138 2002**

INTEREST AREA
PROFESSIONAL AND MANAGERIAL



pages, multimedia presentations, parts lists, assembly instructions, and sales promotion materials.

Technical Writers perform the following tasks:

- Analyze the needs of the target audience.
- Study data and conduct in-depth interviews with subject matter experts to understand the product or procedure.
- Index and cross-reference documents such as bulletins and manuals.
- Produce or arrange for illustrations, charts, and photographs to be included in publications.
- Edit, standardize, or revise material prepared by other writers or personnel.
- Prepare layout of material for publication.
- Prepare rough drafts of the publication for review with the project staff and/or customers.
- Create and edit Web pages for the Internet, intranets, and extranets.

Technical Writers often specialize in a specific industry such as agriculture, health care, pharmaceuticals, telecommunications, computers, or manufacturing. Within their chosen industry, many Technical Writers will specialize further. For example, Technical Writers in the computer industry might specialize in software documentation, tutorials, or user manuals.

Technical Writer is the most commonly used job title for this occupation. Other titles used include Medical Writer, Communications Specialist, Policy and Procedure Writer, Proposal Writer, Publications Specialist, Science Writer, Documentation Specialist, Health Writer, Information Developer, Technical Editor, Web Editor, and Information Designer. Some titles indicate the particular industry in which the occupation is found.



WHAT SKILLS ARE IMPORTANT?

Technical Writers obtain and present specialized information within strict accuracy and format requirements. Technical writing requires the ability to concentrate for long periods of time and strong organizational skills. Technical Writers use the following skills, knowledge, and abilities to accomplish their daily tasks:

- Writing Communicating effectively with others in writing as indicated by the needs of the audience.
- Active Listening Listening to what other people are saying and asking questions as appropriate.
- Speaking Talking to others to effectively convey information.
- Information Gathering Knowing how to find information and identifying essential information.
- Information Organization Finding ways to structure or classify multiple pieces of information.
- Synthesis/Reorganization Reorganizing information to get a better approach to problems or tasks.
- Active Learning Working with new material or information to grasp its implications.
- Product Inspection Inspecting and evaluating the quality of products.
- English Language Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

WHAT'S THE WORK ENVIRONMENT?

Technical Writers usually work at a desk in an office. During planning and production of publications, Writers may be required to travel to another location to discuss a project with others. Technical Writers use personal computers and word processing or desktop publishing software for text, graphic, and multimedia production. Workers often have deadlines to meet. Technical Writers who work under contract or freelance may work from their home or at the employer's site. Writers

may work alone or together under the supervision of a publication chief or editor, a product or procedure specialist, or a marketing manager.

Union Membership

Union membership for Technical Writers depends on union strength within the employing industry. Freelance writers can join the National Writers Union, an affiliate of the United AutoWorkers.

WHAT'S THE CALIFORNIA JOB OUTLOOK?

The following information is from the occupational projections produced by the Employment Development Department's Labor Market Information Division:

Estimated number of workers in 1998: 7,300
Estimated number of workers in 2008: 9,800
Projected Growth 1998-2008: 34.2%
Est. openings due to separations by 2008: 2,200
These figures do not include self-employment.

The Technical Writer occupation will grow faster than average compared with all occupations. Industry expansion will provide most new jobs, although many openings will occur as workers leave the occupation.

Trends

Technical writing has become an increasingly essential occupation in business and government, and jobs can be found in almost any industry sector because of the need for users' guides, instruction manuals, and training materials. Demand for Technical Writers is expected to grow because of the need to communicate new scientific and technical information to others.

WHAT DOES THE JOB PAY?

California Earnings

Technical Writers 2001 Wages

Hourly wages range from \$22.28 to \$33.64 Average hourly wage \$28.66 Average annual wage \$59,612

Source: Occupational Employment Survey of Employers by EDD/LMID.

Hours

The normal workweek is 40 hours; however, this is often exceeded to meet publication deadlines. Some companies pay time and one-half for overtime, while others offer compensatory time off. Self-employed Technical Writers must carefully estimate the number of hours needed to complete a project when they contract for a project.

Benefits

Benefits available in some companies include vacation, holidays, flexible hours, sick leave, bonuses, profit sharing, health and life insurance, and retirement plans. Self-employed Technical Writers must pay for their own insurance.

HOW DO I PREPARE FOR THE JOB?

Education and Training

Some firms will only hire experienced Writers who specialize in one field of technology. Many employers prefer applicants with a four-year college degree in communications, engineering, journalism, or those possessing a degree or certificate in technical writing. Some employers require a strong background of technical knowledge and experience, combined with writing skills. Applicants must have good computer skills and may need a working knowledge of specific industry operations and procedures.

Employers also select trainees from among technicians who have backgrounds in science, military equipment, and communications. Applicants should have good communication skills and be able to convey scientific and technical information accurately and clearly.

Increasingly, companies require Technical Writers to be knowledgeable about computer graphics and desktop publishing, including multimedia production. Only a few years ago, computer literacy was considered merely an asset whereas today it is a requirement. Some Technical Writers may be required to know and read program languages.

Individuals interested in becoming Technical Writers should take courses in communication,

journalism (especially interviewing skills), English, mathematics, physics, chemistry, mechanical drawing, graphic arts, and computer-related subjects. Technical Writers should also acquire a solid background in the industry that interests them as a specialty. Completion of a degree or certificate program in technical writing is very helpful and available through community colleges and university continuing education programs. Beginners often assist experienced Technical Writers and may conduct library research, prepare rough drafts of reports, or perform basic editing tasks. In defense-related organizations, U.S. citizenship may be required because of the classified nature of some projects.

Licensing and Certification

There are no licensing or certification requirements for Technical Writers.

Continuing Education

Technical writing requires people who are not only skilled as Writers but are able to keep pace with changing technology. Today many Technical Writers produce work for online and multimedia publication which requires additional specialized software skills. Those entering the technical writing field can look forward to lifelong learning to keep up with the technological tools of the trade and new research in the communications field. Professional associations offer a place to gain additional knowledge and skills.

HOW DO I FIND THE JOB?

Technical Writers should prepare a portfolio of technical writing samples. These samples may include projects completed as a student or a volunteer as well as professional work. Professional association meetings can be a good place to make contacts and get advice from those experienced in the field. Many associations such as the Society for Technical Communication listed at the end of this guide also maintain job listings on their Internet sites.

Direct application to employers remains one of the most effective job search methods. Private firms are listed in the yellow pages under Writers, Editorial and Publication Services, and Technical Manual Preparation. California job openings can be found at various online job-listing systems including CalJOBSSM at www.caljobs.ca.gov or at America's Job Bank at www.ajb.dni.us.

For other occupational and wage information and a listing of the largest employers in any county, visit the Employment Development Department Labor Market Information Web page at www.calmis.ca.gov. Find further job search assistance from your nearest Job Service office www.edd.ca.gov/jsloc.htm or the closest One-Stop site listed on the California WorkNet site, www.sjtcc.ca.gov/sjtccweb/one-stop.

WHERE CAN THIS JOB LEAD?

Advancement for Technical Writers is limited. In larger organizations, Technical Writers can advance to Information Designer, Senior Technical Writer, or Project Manager positions. Promotion often takes the form of increased responsibility and pay raises. Most Senior Technical Writers complete projects with little or no supervision and must be thoroughly familiar with the project's subject matter.

OTHER SOURCES OF INFORMATION

Society for Technical Communication, Inc. 901 N. Stuart Street, Suite 904
Arlington, VA 22203-1822
(703) 522-4114
Fax: (703) 522-2075
www.stc.org

National Writers Union - National Office West 337 17th Street, #101 Oakland, CA 94612 (510) 839-0110 Fax: (510) 839-6097 www.nwu.org

American Society of Indexers 10200 West 44th Avenue, Suite 304 Wheat Ridge, CO 80033 (303) 463-2887 Fax: (303) 422-8894

www.asindexing.org

American Medical Writers Association Northern California Chapter www.amwancal.org Pacific Southwest Chapter www.amwa-pacsw.org

Council of Science Editors c/o Drohan Management Group 11250 Roger Bacon Drive, Suite 8 Reston, VA 20190-5202 (703) 437-4377 Fax: (703) 435-4390 www.councilscienceeditors.org

Editorial Freelancers Association 71 West 23rd Street, Suite 1910 New York, NY 10010 (212) 929-5400 Fax: (212) 929-5439 www.the-efa.org

International Webmasters Association 119 E. Union Street, Suite #F Pasadena, CA 91103 (626) 449-3709 Fax: (626) 449-8308 www.iwanet.org

International Association of Business Communicators One Hallidie Plaza, Suite 600 San Francisco, CA 94102-2818 (800) 776-4222 Fax: (415) 544-4747 www.iabc.com

National Association of Science Writers P.O. Box 294 Greenlawn, NY 11740 (631) 757-5664 Fax: (631) 757-0069 www.nasw.org

Employment Projections by Occupation www.calmis.ca.gov/htmlfile/subject/occproj.htm

Employment and Wages by Occupation www.calmis.ca.gov/file/occup\$/OES\$.htm

TECHNICAL WRITERS Number 138 Page 5 of 5

RELATED OCCUPATIONAL GUIDES

Newspaper Reporters	No.	113
Copywriters	No.	163
Editors	No.	268
Web Page Designers and Webmasters	No.	559

OCCUPATIONAL CODE REFERENCES

SOC (Standard Occupational Classification)

Technical Writers 27-3042

O*NET (Occupational Information Network)

Technical Writers 27-3042.00

OES (Occupational Employment Statistics)

Technical Writers and Editors 34005

DOT (Dictionary of Occupational Titles)

Technical Publications Writer 131.267-026